

REMARKS

The Office Action mailed October 1, 2004 and references cited therein has been received and reviewed. Applicant has amended claims 1, 8, 15, 17-20, 22 and 24 and added new claims 25-41.

The Examiner objected to claims 19 and 20 under 35 U.S.C. 112(2) as being indefinite. Applicant has amended the claims to clarify the scope of the claims. Specifically, claim 19 was amended to define the liquid separating mechanism as including a condenser, a dehumidifier, coalescing filter and/or particulate filter. Claim 20 was amended to define the gas separating mechanism as including a gas filter, a scrubber, a gas absorber and/or a gas adsorber. Applicant submits that all the pending claims are in proper form pursuant to 35 U.S.C. 112.

Claims 17 and 21 were rejected under 35 U.S.C. 102(b) as being anticipated by Callahan. Claim 17 has been amended to clarify that the exhaust gas separator is a portable device that can be connected to a portable internal combustion engine. Callahan discloses a liquid carbon dioxide plant, not a portable device that can be connected to a portable internal combustion engine. Claim 17 has also been amended to clarify that the shielding gas produced by the liquid and gas separating mechanisms is used to supply shielding gas to an ongoing welding operation. As stated above, Callahan discloses a plant for producing liquid carbon dioxide. The plant is not a portable plant and the liquid carbon dioxide formed by the plant is not used as a shielding gas for an ongoing welding operation. For at least these reasons, claim 17 and all the claims dependent therefrom are not anticipated or made obvious from the cited art of record.

Claims 18-20 were rejected under 35 U.S.C. 103(a) as being unpatentable in view of Callahan. As stated above, Callahan discloses a large scale plant to produce liquid carbon dioxide. This plant is not a portable shielding gas separation unit that can be connected to a portable internal combustion engine. As such, dependent claims 18-20 are not obvious in view of Callahan.

Claims 1-16 and 22-24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ellingsworth in view of Callahan and Blankenship. The Examiner cited Ellingsworth for the purpose of disclosing a welder that includes an internal combustion engine and a generator. The Examiner acknowledged that Ellingsworth does not disclose a gas separator connected to the internal combustion engine. Indeed, Applicant is unaware of any welding manufacturer other than Assignee that includes a gas separator on an internal combustion engine of an engine driven welder. The Examiner cited Callahan as disclosing a gas separation unit that is connected to the exhaust of an internal combustion engine. As stated above, Callahan discloses a liquid carbon dioxide plant. There is no disclosure, teaching or suggestion that a relatively small internal combustion engine that is used on a welder can be connected to the large scale plant disclosed in Callahan to produce a shielding gas for an ongoing welding operation. As such, there is no motivation to combine the teaching of Callahan and Ellingsworth. Blankenship was cited as disclosing that carbon dioxide from a fuel cell powered welder can be used as a shielding gas. Blankenship does not disclose, teach or suggest the use of a gas separator on an engine driven welder to produce a shielding gas. As such, Applicant submits that the pending claims are patentably distinct from the cited art of record.

Applicant submits that the claims presently pending in the above-identified patent application are in condition for allowance and a notice to that effect is earnestly solicited.

Respectfully submitted,
FAY, SHARPE, FAGAN, MINNICH & MCKEE

By: 

ROBERT V. VICKERS

Reg. No. 19,504

1100 Superior Avenue, 7th Floor

Cleveland, Ohio 44114-2579

Telephone: (216) 861-5582

Facsimile: (216) 241-1666